

1   **THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY**  
2   **OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:**

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4   1.   A DTE comprising

5       a port;

6       at least one signal line connected to said port to establish a communication path;

7       a set of transceivers, each associated with a respective circuit in said DTE to  
8       establish communication along said communication path in accordance with a selected protocol;

9       a switch in each of said signal lines, each of said switches having a set of connections  
10      with each of said connections associated with a respective one of said transceivers; and  
11       a control signal to condition said switches to connect all of said signal lines with a  
12      connection associated with a selected one of said transceivers.

13   2.   The DTE of claim 1 wherein said selected protocol is defined by one of a plurality of  
14      electrical interface standards.

15   3.   The DTE of claim 1 wherein said plurality of electrical interface standards includes, but  
16      not limited to, EIA/TIA-232, EIA/TIA-449, EIA/TIA-530, and EIA/TIA-530A and IEEE 1284  
17      standards.

18   4.   The DTE of claim 1 wherein said port connects to a corresponding port of a DCE to  
19      effect communication between said DTE and said DCE via said selected protocol.

20   5.   The DTE of claim 4 wherein said DCE includes a protocol identifier for providing an  
21      identification signal indicative of the selected protocol to a interface controller.

22   6.   The DTE of claim 5 wherein said interface controller provides said control signal to said  
23      switches, said control signal being dependent on said identification signal.

24   7.   The DTE of claim 1 wherein said DTE includes a power controller for controlling  
25      electrical power to said switches depending on whether said port is coupled to a DCE thereby  
26      reducing power consumption by said DTE.

27   8.   The DTE of claim 7 wherein said power controller enables said DCE coupled to said port  
28      after said selected protocol has been determined

1 9. An interface system for coupling a plurality of signals between a DTE and a DCE via a  
2 plurality of communication paths, said system having:

3 a DTE port having at least one signal line to establish one of said plurality of  
4 communication paths, said DTE having a set of transceivers each associated with a respective  
5 circuit in said DTE to establish communication along said communication path in accordance  
6 with a selected protocol;

7 a DCE port having at least one signal line to establish one of said plurality of  
8 communication paths, said DTE having an interface driver circuit to establish communication  
9 along said communication path in accordance with said selected protocol;

10 a switch in each of said signal lines, each of said switches having a set of connections  
11 with each of said connections associated with a respective one of said transceivers; and

12 a control signal to condition said switches to connect all of said signal lines with a  
13 connection associated with a selected one of said transceivers.

14 10. The system of claim 9 wherein said plurality of communication paths includes a plurality  
15 of connector pins to provide said plurality of communication paths between said DTE and said  
16 DCE.

17 11. The system of claim 10 wherein said DTE connector and DCE connector include a  
18 minimal number of predetermined connector pins, wherein said minimal number of  
19 predetermined connector pins is determined by any one of said plurality of electrical interface  
20 standards having the greatest number of signals needed for communication.

21 12. The system of claim 9 wherein said plurality of electrical interface standards includes, but  
22 not limited to, EIA/TIA-232, EIA/TIA-449, EIA/TIA-530, and EIA/TIA-530A and IEEE 1284  
23 standards.

24 13. The system of claim 9 further comprising a power controller for controlling power to said  
25 DCE when said DTE and said DCE are in a coupling position.

26 14. The system of claim 13 wherein said power controller controls electrical power to said  
27 switches when said DTE and said DCE are in a non-coupling position, thereby minimizing  
28 power consumption by said DTE..

1 15. A multi-protocol port coupled to a plurality of selectable circuits, each of said circuits  
2 being associated with an electrical interface standard and selectable via a mode-select input  
3 signal in order to facilitate communication with a device coupled to said port, said device having  
4 a circuit based on one of said electrical interface standards.

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